

WHICKHAM
URBAN DISTRICT COUNCIL.

Annual Report

OF THE

Medical Officer of Health

AND THE

SANITARY INSPECTOR

Mr. Geo. E. HOPPER,

FOR THE

YEAR ENDING DECEMBER, 1914.

SWALWELL,
ARNOLD A. FLETCHER, GENERAL PRINTER, MARKET LANE,
1915.



REPORT.

WHICKHAM,

MARCH, 1915.

MR. CHAIRMAN AND GENTLEMEN,

I beg to submit my Annual Report for 1914.

The official estimate of the population of the whole district is 20, 575. This probably errs slightly in the way of excess, as, though the population is steadily increasing, it is not doing so to the same extent as it did during the last intercensal period. Any error that there may be, cannot to any great extent, invalidate the statistics based on the above estimate. Distributed over the four Wards the figures approximately are:— Whickham 3,251, Swalwell 4,312, Marley Hill 2,254, and Dunston 10,758.

BIRTHS:—There were registered in the district 546 births, and to residents outside the district 4, making a total of 550, which is 15 less than last year. Of these, 297 were males, and 253 females, 534 were legitimate and 16 illegitimate.

In the separate Wards the numbers were:— Whickham 73, a decrease from last year of 19; Swalwell 126, a decrease of 30; Marley Hill 52, an increase of 13; and Dunston 299, an increase of 21. Two of the Wards thus show a marked increase, while the other two show a still more marked decrease.

The birth rate is 26·73, which is 1·72 lower than last year, and the lowest on record for the district.

It is 4·6 lower than the average for the past five years.

It is 4·4 lower than the County, and 5·7 lower than the County average, but still 3·1 higher than that for England and Wales at 23·6.

It is evident then that the birth rate is steadily falling at rather an alarming rate.

DEATHS:—The number of deaths registered in the district was 222, which is 13 less than last year. In addition there were 44 deaths of residents in Public and Private Institutions and elsewhere, outside the district, viz:- 13 in the Royal Victoria Infirmary, Newcastle-on-Tyne, 12 in the Union Workhouse, 3 in the County Asylum, 7 in the Isolation Hospital, Norman's Riding, 1 in the Sanatorium, Sealburn, 2 in the Fleming Memorial Hospital for sick children, 2 in the Lying-in Hospital, and 4 elsewhere, while 4 deaths of non-residents registered in our area, have been transferred to their respective districts.

The nett deaths belonging to the district were thus:- 262, which is 5 less than last year. Of these 140 were males and 122 females.

For the separate Wards the numbers are:- Whickham 38, a decrease of 4; Swalwell 53, a decrease of 13; Marley Hill 31, an increase of 13; and Dunston 140, a decrease of 1.

The death rate is 10·78 for those actually registered in the district, and 12·73 for the actual residents after adjustment of the incoming and outgoing transfers.

This is 0·71 lower than last year, and 0·4 lower than the average of the last five years.

It is 2·2 lower than the County, and 3·0 lower than the County mean for the last five years, and 1·2 lower than that for England and Wales.



INFANTILE MORTALITY:— The deaths under one year numbered 61, as registered in the district. To these have to be added 2 deaths which occurred in Institutions outside the district, viz:- 1 in the Lying-in Hospital registered as due to “intra cranial hemorrhage—compression of the brain”, presumably due to unavoidable injury at birth, and 1 in the Union Workhouse Infirmary, registered as due to pulmonary tuberculosis at 8 months, a rare disease in one so young. This makes the nett infant deaths 63, which is 23 less than last year.

Belonging to the various Wards the numbers were:- Whickham 5, a decrease of 7; Swalwell 9, a decrease of 19; Marley Hill 10, an increase of 7; and Dunston 39, a decrease of 3; all thus show a decrease except Marley Hill.

The Infant Mortality is 114, which is 36 lower than last year, and 3 lower than the average of the last five years.

Considering these two facts, 1st—that the year was a fairly typical diarrhoea one, i.e. that the summer and autumn were warm and dry; 2nd—that this is the most dominant factor in determining the amount of Infant Mortality, the result must be regarded as fairly satisfactory.

It certainly is a great improvement on the record of 1904, exactly ten years ago, when as your newly-appointed Medical Officer of Health, I prepared my first Annual Report. It was a fairly similar year, but the Infant Mortality was then 190, and the average for the previous ten years was 160.

Great as this improvement is, the Infant Mortality is still much too high, and higher than it need be, and in view of the great fact of the rapidly decreasing birth rate, no effort should be spared in trying to reduce it further. It compares favourably with the County at 134, and the County average at 139, but is still higher than that for England and Wales at 105.

The direction in which further efforts should be made can best be determined by considering the causes of this mortality, as set out in detail in Table IV appended to this report.

THE COMMON INFECTIOUS DISEASES have as usual not been responsible for many deaths, being represented by 3 deaths from Measles.

DIARRHŒAL DISEASES are of more importance as being generally regarded as more amenable to efforts of prevention. The season was a fairly typical diarrhœa one. Eleven deaths occurred from these diseases as against 13 last year. None occurred in Whickham Ward, only 1 in Swalwell, and this in a child which was already Marasmic, but contrary to last year, 4 occurred at Marley Hill, which is excessive, while 6 occurred at Dunston.

I have in former reports dealt very fully with the causes of these diseases and indicated the direction in which preventive measures should be pursued.

The first is the help and encouragement to ensure breast feeding wherever possible, as is done by the early visits of our nurses acting as health visitors, and where this is found to be impossible, giving advice as to the best methods of hand feeding, the second is by the close inspection of dairies and milk-shops to ensure a clean milk supply. The utmost efforts have been made to raise the standard of the cowbyres, dairies, and milk-shops, with such success that we can now guarantee a much higher standard of purity and cleanliness of milk than ever we could before. The third is the enforcement of cleanliness in yards, streets, and back streets, and as far as possible, in the houses.

In one matter, however, we are deficient, and that a very important one, viz:- our prevailing convenience throughout the district is still the most objectionable ash-closet, and until we can get for this the substitution generally of the water-closet, with covered ash-bins

for the dry house refuse, we cannot claim to be an up-to-date, or anything like a satisfactory Sanitary Authority. It is quite certain that until this essential reform is accomplished, we will continue to get this altogether unnecessary wastage of infant life.

No doubt things are now very much better than ten years ago, when the still more objectionable large open ash-pits and ash-pit privies were generally prevalent. The very success we attained in the substitution for these, of the smaller ash-closet, thoroughly cleaned at least once a week by the Council's own workmen, has to a large extent, paralysed our efforts towards the greater conversion.

Chiefly by the former reform, we have almost eliminated Typhoid fever, for, though we still get an occasional case, nearly always imported, the disease never spreads as it used to do, and though we get far more diarrhœa than we ought, the epidemics are nothing to what they were in the earlier days of my practice here. The reduction of mortality from these diseases is no true measure of the reduction of the prevalence. Still both could be, and ought to be further reduced, if not altogether eliminated, as they would be by the universal substitution of the water carriage system. Until this is accomplished, we cannot expect much further reduction in the prevalence of, and fatalities from, these diarrhœal diseases, and, free though we have been for years of Typhoid fever prevalence, we cannot feel secure against its re-currence.

Undoubtedly, this is the greatest sanitary reform in which we stand in need.

I am glad to record a decrease in the mortality from the group of WASTING DISEASES, as at least part of this we ought to be able to control. We can do nothing as far as I know to prevent congenital malformations, and in most cases it is perhaps just as well if we can do nothing to prevent such cases dying. To what extent it is possible to prevent the mortality from premature births it is difficult to say. It is none the less an important problem involving a careful

study of ante natal hygiene. We have still much to learn on this subject, and equally to learn how best to apply the knowledge we possess.

That premature births could, to a considerable extent, be reduced, I feel quite certain. and that more children prematurely born could be preserved, I equally feel certain. For the former a change must come in the attitude of the medical profession and its relationship to the expectant mother. In these cases where premature birth is not intentional much might be done if it became the rule, as I think it ought to be, for the expectant mother to ask for and receive careful medical supervision during the period of her pregnancy. We already know enough of ante natal hygiene to be able to give such advice as would not only prevent many premature births, but would conserve the health of the mother and prevent many calamities as, for instance, that dreadful condition of puerperal eclampsia, but insure the birth of more vigorous children.

Unfortunately, it is only too true, that a considerable proportion of premature births can only be described as intentional, and to prevent this would necessitate the compulsory supervision by a doctor of the expectant mother during her pregnancy, which public opinion would at present resent, but which may become necessary if the birth rate continues to fall as it is doing.

The mothers need not be too severely blamed, as they often act in sheer ignorance, and have no idea of the enormity of the offence they commit when they try to produce abortion, and still less a conception of the danger to themselves of trying to effect it.

I have had, in common I believe with most practitioners, plenty of evidence of this. I have often been asked by married women who did not want to have any more children, and who have found themselves pregnant, to give them something to procure abortion. They have come to me quite innocently, having no idea that they were doing anything wrong, and have been apparently quite amazed

when I have explained the seriousness of their offence, and at the same time told them that nothing of the kind could be done without the greatest danger to their own lives. This is also true of many unmarried women who have asserted that they were prepared to take the risk. I hope I have duly impressed them and prevented all further attempts. I have known of other cases where, influenced by the specious but veiled advertisements of abortionist quacks, women have made such attempts, and I have been able to see the blue line on the gums of lead poisoning.

No doubt in some cases abortion has resulted with serious injury to the mother's health, in others, the early abortion has not occurred, but a feeble child has been prematurely born, while in others, the only result has been injury to the mother and a feeble child has been born at full term, but born only to die, and a certificate of death issued as due to defective vitality, atelectasis, atrophy, or if the child has struggled on for a few weeks or months, marasmus, has closed the episode.

To what extent methods in use for the prevention of conception—for they are in use and form a considerable factor in the lowering of the birth rate—injure the mother, and when not as successful as anticipated, the child, I am unable to say, but it is quite likely that failing to effect their purpose, they result in the production of an enfeebled and possibly premature child.

Syphilis is a well known potent factor in the production of premature births and of diseased children at full term.

During the year 3 deaths are attributed to this cause, which is more than usual, and probably rather indicates a greater courage in the doctors certifying, than an increase of the disease. It may be regarded as quite certain that a certain proportion of deaths attributed to Atrophy or Marasmus, are in reality due to this cause, though in the absence of characteristic symptoms, it is natural to ignore it. Evidence of this has been got in many cases where an opportunity

has been given of applying the Wasserman test to the parents, and a positive result has been got. This fact is of great importance, because where such is known or suspected, treatment of the parents, and especially of the mother throughout pregnancy, and of the infant from birth, could save many lives. Intemperance is another great cause of premature birth and defective vitality at birth, and this equally in both parents—surely another avoidable cause.

TUBERCULOSIS figures more prominently than usual, four deaths being attributed to it, one in the Union Workhouse Infirmary being due to Pulmonary consumption.

Although I have a strong conviction that many children are infected by tubercle during the early months of life, through being fed on tuberculous milk, it is generally in later life that tuberculous diseases so caused manifest themselves and prove fatal, for tuberculous diseases are generally very chronic. We make no attempt to discover tuberculous cows in the various farms or byres, and do not examine milk for the presence of tubercle bacilli, we leave that matter to the County Authority, but we do our best by supervision of cow byres and cow sheds, as to ventilation, lighting, drainage and cleanliness, to secure the most healthy conditions possible and so to prevent tuberculosis in cows.

CONVULSIONS caused four deaths, but in practically all cases this is not a disease, it is only a symptom of some other condition which too often eludes discovery.

RESPIRATORY DISEASES:—These, as usual, formed a considerable factor in our infant mortality, being responsible for 9 deaths, nearly as many as caused by Diarrhœa in a fairly typical diarrhœa year, 6 of these are attributed to Bronchitis, and 3 to Pneumonia (all forms), almost certainly chiefly Broncho-pneumonia, for true Croupous pneumonia though common enough, is not usually fatal, at least in my experience, in young children. Bronchitis and Broncho-pneumonia are practically the same in most cases.

I have, in a former report, dealt fairly fully with this but would again re-iterate my conviction, which only becomes the stronger the more I see of and study these cases in general practice, that these diseases and the fatalities from them are every whit as preventible as summer diarrhœa, and an equally vigorous crusade in teaching the methods of prevention and treatment would effect an equal diminution in infant mortality, and a still greater diminution in general mortality, for heavy mortalities continue over the first three or four years of life, and besides it is these as complications, which are the main causes of death in Measles and Whooping Cough, and the same means which prevent these diseases and their fatalities, as distinctive diseases would prevent them as complications in these other diseases.

The means are all that is involved in the proper management of children, as regards clothing and feeding, the brightness and ventilation of rooms—the hygiene of childhood. It practically amounts to the open air management and treatment of children, with proper provision of clothing to protect against cold. It means a further educational crusade.

This leads us to consider the question as to how this could best be effected. Recently a lady called on me to urge the claims of the Child Welfare Association, suggesting that, as an experiment, one part of your district should be selected in which rooms should be taken and fitted up as a Dispensary where doctors and nurses should attend on fixed days, and which mothers should be invited to attend with their babies, to have them regularly examined and periodically weighed, occasion being taken to give advice and instruction in all matters pertaining to child welfare. This matter was duly brought before you and you appointed a small Committee to consider it. This Committee has not yet met. Personally, I may say my attitude is entirely sympathetic, but I have just a doubt as to whether the present is an opportune time, owing to the increasing dearth of both doctors and nurses, when, in the immediate future

(as I believe) every one of these who can possibly be spared will be required for military purposes, and those who are left for civilian work will only have time for absolutely essential medical work.

It is only on a smaller scale than that which I have constantly advocated as one of the purposes to which we should devote the Cottage Hospital that we hoped to get for the district, and the part in which the Council, as a Council, would take the largest part. Even the efforts towards getting this hospital have had to be suspended until after the war.

ZYMOTIC DISEASES:—There were 31 deaths from these diseases, which is 5 more than last year, Of these, 1 was due to Typhoid fever, 4 to Measles, 3 to Scarlet fever, 1 to Whooping cough, 7 to Diphtheria, and 15 to Diarrhœa under 2 years.

The Zymotic death rate is 1·5, which is 0·2 higher than last year, 0·7 lower than the County, and 0·6 lower than the County average.

The deaths per ages and districts are given in the following Table:—

DEATHS FROM ZYMOTIC DISEASES.

	Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 60 years	Over 60 years	Whickham	Swalwell	Marley Hill	Dunston	Total
Smallpox	..	..	..	..	..	..	..	..	..	..	..
Measles	3	1	..	..	..	..	..	2	..	2	4
Scarlet Fever ... ..	..	2	1	..	..	..	..	2	..	1	3
Whooping Cough ... ..	..	1	..	..	..	..	..	..	..	1	1
Diphtheria (including Membranous Croup)	..	..	..	..	..	..	..	..	..	..	..
Fever Typhoid ... ..	..	1	6	..	..	..	4	1	1	1	7
Diarrhœa (including Enteritis under 2 years)	..	..	..	..	1	..	..	..	..	1	1
	11	4	..	..	..	..	..	2	4	9	15
Totals	14	9	7	..	1	..	4	7	5	15	31

PHTHISIS PULMONALIS:—There were 30 deaths from this cause, being 10 more than last year. Of these 4 occurred outside the district.

This is equal to a death rate of 1·45, which is 0·45 higher than last year. It is 0·53 higher than the County, and 0·56 higher than the County mean.

The following Table gives ages and districts:—

DEATHS FROM TUBERCULAR PHTHISIS.

Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 45 years.	45 to 65 years.	Above 65 years.	Whickham.	Swalwell.	Marley Hill	Dunston	Total
1	1	2	10	10	6	4	4	11	3	12	30

From other tubercular diseases there were 9 deaths, 2 being due to tubercular meningitis. This is 1 more than last year. This is equal to a death rate of 0·4, the same as last year.

The following Table shows the deaths from all tubercular diseases:—

DEATHS FROM ALL TUBERCULAR DISEASES.

Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 45 years.	45 to 65 years.	above 65 years.	Whickham.	Swalwell.	Marley Hill	Dunston.	Total.
4	2	3	12	12	6	5	5	13	3	18	39

This is equal to a death rate of 1·89, which is 0·48 higher than last year.

It shows that 14·88 per cent of all deaths during the year were due to tubercle in one form or other.

This is a very curious and very unsatisfactory result. At a time when so many new agencies have been called into existence for the early diagnosis and treatment of tuberculous disease, and Pulmonary tuberculous specially, and when money has been lavishly expended, we have to record a great increase in the mortality.

Compared with the notifications the mortality also is excessive. It is well known that the great majority of tuberculous diseases run a very chronic course, and while I am afraid we must still say that the vast majority of cases of pulmonary tuberculosis ultimately die of that disease, in spite of sanatorium treatment, one did expect that, at any rate, life would be prolonged.

Compulsory notification has been in practice long enough now to justify the expectation that we should have a complete record of all cases now existing in the district. If that were the case, one would naturally expect that, in any one year, the notifications and deaths of that year would be approximately the same, a large number in excess—from 3 to 5 times the number dying, still remaining on the books, but this is not so. If we take all the cases of tuberculosis, the same difficulty arises, in spite of the fact that most cases of tuberculosis, other than pulmonary, recover.

True, those of tubercular meningitis practically all die after a very short illness, and the same is true of a considerable proportion of those of tuberculous peritonitis, but, over and above, there are the cases of tuberculosis of glands, and of bones and joints, most of which either recover, or only die after long illness. Yet for the two years during which full notification has been in force we have had a total of 96 of all forms of tuberculosis, with 67 deaths, leaving a balance still living of only 29.

The only explanation of this can be either a great laxity in notifying, or a hesitation on the part of practitioners to notify until

the disease is completely confirmed, when, at least in pulmonary cases, they are beyond hope of curative treatment.

On the other hand it is but fair to state that from the number of cases in which sputum has been sent for bacteriological examination, and the result has been returned negative, it is evident that genuine efforts are made to arrive at a true and early diagnosis.

Too much reliance is evidently placed on this method of arriving at a diagnosis, for unless cases can be diagnosed and brought under the most thorough modern treatment before the tubercle bacilli appear in the sputum, complete curative results will not be attained.

In many cases however, I believe, and in fact know, that this is done, only the practitioners treat the cases themselves frequently with perfect results, but do not notify as they feel that the evidence is not positive enough to justify them in so doing. If this is true in pulmonary tuberculosis, it is still more common in the minor forms of tuberculosis. The practitioner treats them as if they were certainly tubercular, but as they so often speedily get well, he has doubt as to his diagnosis, and does not notify. The net result is that, undoubtedly, large numbers of cases of tuberculosis are not notified at all, simply because the practitioners decide to wait the result of treatment, and in the favourable cases the notification is not made, and hence it is mostly the unfavourable cases, those going towards a fatal termination, that are properly notified, hence the apparent excessive mortality proportional to notifications.

If these statements be correct, the only way in which we will be able to judge of the effect of all the efforts towards the mitigation and treatment of tuberculosis now being made, can be by the annual mortality.

It is too early yet to judge, but, so far, our record is not good.

ACUTE RESPIRATORY DISEASES:—There were 38 deaths from these diseases, being 14 less than last year. This is equal to a

death rate of 1·84, which is 0·77 lower than last year. It is 0·45 lower than the County, and 0·68 lower than the County mean.

The following Tables shows ages and districts:—

DEATHS FROM ACUTE RESPIRATORY DISEASES.

	Under 1 year.	1 to 2 years	2 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 45 years.	45 to 65 years.	Above 65 years.	Whickham-	Swalwell.	Marley Hill.	Dunston.	Total
Bronchitis,	6	1					1	6		1	3	10	14
Pneumonia. (all forms)	3	3	2	2		2	3	4	1	4	1	13	19
Others				1			3	1	2	1	2		5
Total—	9	4	2	3		2	7	11	3	6	6	23	38

This Table again shows how fatal these diseases are at the extremes of life, in contra-distinction to Pulmonary Phthisis.

There were no deaths from Puerperal Fever, but 4 from other accidents and diseases of pregnancy and parturition.

There were no deaths directly attributed to Alcohol, or Cirrhosis of the Liver.

There were 13 deaths due to CANCER, of which 3 were at Whickham, 1 at Marley Hill, and 9 at Dunston.

There were 20 deaths due to HEART DISEASE, mostly in advanced life. Of these, 3 were at Whickham, 6 at Swalwell, and 11 at Dunston.

There were 11 violent deaths of which 1 was from suicide.

The following Table shows the most important vital statistics for the whole district, and its component parts. Residents and non-residents are included.

	Whickham	Swalwell	Marley Hill	Dunston	Whole District
Birth Rate	22·45	29·22	23·07	27·79	26·73
Death Rate	11·68	12·28	13·75	13·0	12·73
Infantile Mortality	68	71	192	130	114.
Zymotic	1·23	1·62	2·21	1·39	1·56
Phthisis	1·23	2·55	1·33	1·11	1·45
All Tubercular	1·54	3·01	1·33	1·67	1·89
Respiratory	0·92	1·39	2·21	2·13	1·84
Cancer	0·92	nil.	0·44	0·83	0·63
Heart disease	0·92	1·39	nil.	1·02	0·97

This Table on the whole is satisfactory. It shows the general tendency downwards of birth rates, especially at Whickham and Swalwell, that of Marley Hill has again risen, while Dunston does little more than indicate an arrest of the former decline.

The death rates are generally satisfactory, though it is exceptional to find that of Marley Hill highest. This is due almost wholly to the high infant mortality, which, on the other hand, was very low last year.

The most unsatisfactory feature, is the rise in the tubercular death rate, when a decline might have been anticipated. This is specially true of the Phthisis rate.

Notifications.

There were 248 notifications of infectious diseases, being 56 more than last year, and 87 more than the previous year.

Of the ordinary notifiable infectious diseases, there were 201, while of tuberculosis there were 42, and of Ophthalmia Neonatorum, 5.

Dealing first with the infective fevers, there were 116 of Scarlet fever, being 5 more than last year, 65 of Diphtheria, being 44 more than last year, 4 of Enteric fever, an increase of 2, 14 of Erysipelas

an increase of 10, and 2 of Puerperal fever.

There was therefore, an increase all round, that of Diphtheria being the most serious. and the Whickham Ward having the greatest number.

Taking the Wards separately, 66 were from Whickham, 53 from Swalwell, 8 from Marley Hill, and 75 from Dunston. The smallest number was thus from Marley Hill.

Out of the 185 cases for which the Isolation Hospital is available, 115 were sent. The number would have been greater, but at one period, owing to a similar increase in the number of cases in the other districts, the hospital became so overcrowded that no more could be admitted, and over a lengthened period only the very bad cases, or those which could not be reasonably isolated at home, could be admitted. At the time when notice was given that no more cases could be admitted, Scarlet fever was markedly increasing in prevalence at Dunston, but it really made no difference, instead of this compulsory treatment at home, giving rise to a further increase of notifications, as a matter of fact, notifications rapidly decreased.

During a great part of the year, the hospital was undoubtedly greatly overcrowded with Scarlet fever and Diphtheria, and as this has occurred on several occasions during the last few years, the question as to the adequacy of accommodation arises. During the period of the most serious overcrowding, I understand the greatest want was adequate accommodation for a sufficient staff of nurses. This I should regard very seriously.

Though I have nothing to do with the management of the hospital, which is in the hands of a Joint Committee of the three districts which it serves, and which has its own Medical Officer and Nursing Staff, it seems only right that I should express certain convictions which I have regarding the infectious diseases, for the

consideration of the representatives from this Council on the Hospital Committee, as the medical adviser of this Council.

The most important fact is that the provision of an Isolation Hospital as far as Scarlet fever and Diphtheria are concerned, even when every effort has been made, and that successfully, to get admitted a large proportion of the cases notified, has had no appreciable effect in diminishing the incidence of these diseases. Let the explanation be what it may, that is our experience, which in no way differs from the experience of others. From all over the country we get similar reports. As measures for the prevention of epidemic diseases, at least as regards Scarlet fever and Diphtheria, isolation hospitals have proved failures. That such hospitals are a boon to the patients resident in overcrowded houses, is certain enough, but the success is not sufficient, in my opinion, to warrant compulsory removal, or even removal by persuasion from any house where accommodation is sufficient, or where reasonable isolation can be effected, and where the parents or guardians are prepared to give reasonable attention. It is almost certain that the spread of these diseases is effected mostly by undetected mild cases and by carriers.

This cannot be equally truly said of Typhoid fever, at least where the water carriage system of sewerage does not exist, though where such system is in existence I believe that cases of Typhoid fever can be quite safely treated at home, without serious danger to the public health, though as regards the treatment of the individual case, no doubt the skilled nursing by competent nurses in a well managed hospital gives a great advantage.

On the other hand, it is practically impossible to control an epidemic, or to restrain a threatened epidemic of Typhoid fever, where the conveniences are earth or ash closets.

The practical inference to draw from this, is the consideration as to whether it is advisable to greatly enlarge the Isolation hospital

in order to accommodate all cases of Typhoid fever, Scarlet fever, and Diphtheria, or whether it would not be better to discriminate between the cases, and only send serious cases, or those only which cannot be reasonably isolated at home.

For my part, I would send from our district nearly all cases of Typhoid fever, but only a very limited number of those of Scarlet fever and Diphtheria. In my opinion this would do no harm to the public health, and would save a great deal of money, which might be spent to much greater advantage, for instance, in hastening the conversion of ash-closets to water-closets.

With regard to the notification of Tuberculosis, in view of the number of deaths, it seems quite certain that we do not get notified all the cases which exist, whatever the cause may be.

There were no notifications of Cerebro-spinal meningitis or Polio-myelitis, but there were 5 of Ophthalmia Neonatorum.

The notification of the latter has been of great value, because, on receipt of notification, a nurse has attended and seen that the instructions of the doctor are thoroughly carried out, with the very best results.

We will now consider the infectious diseases separately:—

SMALLPOX was again entirely absent. Exemptions from vaccination consequently increase, and a large population is growing up quite unprotected. This will continue until an epidemic of Smallpox occurs, when I have no doubt the whole community will speedily seek this, the only protection. We have already had abundant evidence of the unreliability of isolation in Scarlet fever and Diphtheria, and we have no reason to suppose that it would be any more reliable in this, a much more serious and much more infectious disease.

We can only “wait and see”.

SCARLET FEVER:—There were 116 cases notified, being 5 more than last year, and 55 more than the previous one.

The cases were fairly evenly distributed over the Wards, except at Marley Hill where only one case occurred.

Seventy-eight cases were sent to hospital.

On the whole the type was, as in most recent years, of a mild character, and only 3 deaths occurred—all in hospital. This is a case mortality of 2·58 per cent, and a death rate of 0·14, which is 0·08 lower than the County, but 0·07 higher than the County mean.

DIPHTHERIA, INCLUDING MEMBRANOUS CROUP:—There were 65 cases notified, being 44 more than last year, of these 43 were at Whickham, 10 at Swalwell, 3 at Marley Hill, and 9 at Dunston. The greatest incidence was therefore at Whickham, as usual. It is curious how from year to year there is such a prevalence of this disease at Whickham. Moreover, during the year, the type of disease was of marked malignancy, the patients being prostrated at once. This was commented on at the hospital, the cases being quite different in character from those admitted from other districts of the conjoint hospital area.

As a general rule, the throat was not complained of and the most noticeable condition was the extreme prostration of the patient; but when the throat was examined, the whole pharynx was thickly coated. One case died shortly after being seen of pure toxæmia, before there was time for the antitoxin, which was at once administered, to have any effect. All the others responded perfectly to antitoxin, the throat quickly cleared, and all other symptoms improved, and it was only when convalescence seemed quite established, that symptoms of paralysis, with heart failure developed. One treated at home died in this way, suddenly in a fright, apparently due to a dream. Another developed typical "heart block", during the second week of illness. I understand that the cause of death of

those who died in hospital, was of the same character associated with Albuminurea, Nephritis and suppression of urine.

Only one case, as far as I know, was of the laryngeal type, and this was so ill, when first seen, that to prevent death from suffocation, tracheotomy had to be performed the same day at home with the most satisfactory result.

Altogether there were 7 deaths of which 3 occurred at home and 4 at hospital. This gives a case mortality of over 10 per cent, which is higher than we expect nowadays, with the immediate administration of antitoxin, but still very much lower than in pre-antitoxin days.

The death rate was 0·34, which is 0·11 higher than the County and 0·17 higher than the County mean.'

TYPHOID FEVER:—There were 4 cases notified as against 2 last year. One was clearly imported being landed from a ship, and was too ill for removal to hospital, another was a very doubtful case. It was negatived by the Widal re-action, both before removal to hospital, and while it was in hospital, and the hospital physician was quite satisfied that it was not a genuine case. The other two cases occurred at Marley Hill, and were confirmed by the Widal re-action. They did not seem to have any connection with one another, but they occurred at a time when the water supply for that area was so reduced - that there was practically a water famine - and other, and very doubtful supplies of water were being utilised.

Though the cases could not directly be traced to this, in one case, at least, the milk used was from a small farm which had been using one of these very doubtful supplies. We had the water from these supplementary supplies analysed, and while all were doubtful, three were fairly satisfactory, and one - and that unfortunately, the most plentiful - was so bad, that we had it stopped. At the same time we issued notices to boil the scanty public supply before use,

and we stopped any further milk supply from the above farm, until conditions were improved.

No further cases of Typhoid were notified.

ERYSIPELAS:—There were 14 cases notified, as against 4 last year. There is every reason to believe that they were mostly genuine cases of true Erysipelas, and not merely cases of surgical sepsis. They were fairly evenly distributed over the wards.

Non-Notifiable Infectious Diseases.

MEASLES:—There was no great prevalence of this disease during the year, though it assumed epidemic prevalence at Swalwell during July and August, and caused two deaths.

In December it again assumed epidemic prevalence in Dunston, where two deaths occurred, and isolated cases occurred at Whickham and Swalwell, suggesting further epidemic prevalence during 1915.

Altogether there were 4 deaths during the year, equal to a death rate of 0·14, which is 0·03 lower than the County, and 0·24 lower than the County mean.

WHOOPING COUGH:—This disease was again very little prevalent so that for two years, we have had less than for many years previously. It caused only one death, equal to a death rate of 0·04, which is 0·32 less than the County, and 0·3 less than the County mean.

DIARRHŒA:—In accordance with the character of the Summer and Autumn, this disease was considerably prevalent and fatal, though much less so, than in previous years of a similar character. At all ages it caused 17 deaths. This is equal to a death rate of 0·82, which is 0·3 lower than the County, and 0·17 lower than the County mean. Proportional to population, Marley Hill suffered most severely, probably due to the breakdown of the water supply during the Summer and Autumn.

General Sanitation.

In accordance with an innovation introduced last year into the Annual Report, the Sanitary Inspector, Mr. Hopper, has kindly written a detailed report of the most important work done in our department, which I have much pleasure in inserting.

In doing so, I wish to direct attention to the great amount of house drainage work which has been done, and especially to the thoroughness of it.

Naturally, much public alarm has been caused by the continued prevalence of Diphtheria of a peculiarly malignant type in the district. As a consequence, there has been much testing of drains, and whether there is a direct connection between Diphtheria prevalence and defective house drains, or not, the fact has been elicited that in practically all cases the drainage has been found defective—open joints, badly made joints with consequent leakage and pollution of soil. As a matter of fact, in many cases through these defects, Whickham, at the top of the hill where the drains begin has been acting as a ventilator to the bulk of the drainage system.

I am afraid that the evidence shows that a great deal of scamped work has been done in the past, though it has still to be admitted that the village almost completely undermined by colliery workings and quite a number of rather serious subsidences have occurred, some even endangering life. It is only reasonable to suppose that many more slight subsidences, almost imperceptible, have occurred; but still sufficient to open badly made joints, while, as the subsoil is mostly clay, the same thing is liable to occur, hence the necessity of making such drains as perfect and secure as it is possible to make them. Now, I am glad to say, that under Mr. Hopper's direction and teaching, all the builders are on the alert, and the workmen seem to take a pride in doing their work thoroughly, so that there is no likelihood of further scamp work.

REPORT OF THE SANITARY INSPECTOR.

Health Department,
Council Offices,
Whickham.
March 1915.

To the Medical Officer of Health,

In compliance with your request, I beg to hand you the summary of the work which has been done in this Department during the past year.

The year has been a busy one if we take only two branches of the work alone, namely, the House Drainage and Inspections under the "Housing and Town Planning Act, 1909", as will be seen from the following summaries.

DRAINAGE:—We have, under this heading, been brought into close contact with all the builders in this district during the year, for all have received a fair share of the various works.

It is quite true that at one time our ideas did clash with some of theirs regarding the water testing of drains, the construction of intercepting and access chambers, and the final concreting of the respective drainage systems (a preventative against possible settlement of the ground) before being filled in.

They now see eye to eye with us, and the works are carried through in an amicable manner to all concerned. We follow carefully each work on its commencement to its completion, giving it daily supervision, and testing with water immediately the joints are sufficiently hard,

Our House Drainage systems are each provided with an intercepting trap immediately at the point where the drain enters the private premises,

Each system is provided with an inlet and an outlet ventilating shaft, and the ultimate disposal of the sewage is into the river Tyne.

The summary for the two past years will possibly be interesting, if only for the sake of comparison.

	1913.	1914.
Length in yards, of old drain removed	260	907
Length in yards, of new drain constructed	952	1290
Houses provided with drains	11	4
Number of house drains tested with smoke	36	51
Number of house drains found defective	26	39
Number of water tests applied to new drains	117	217
New anti-bell traps fixed	82	116
Privies removed	3	7
Ash-pits removed	6	10
Ash-closets removed	9	13
Ash-closets provided	2	4
Water-closets provided	13	26

The prospect of further conversions into water-closets in the near future is distinctly favourable.

HOUSING AND TOWN PLANNING, ETC., ACT, 1909.— Altogether 80 houses were inspected during the year, 30 of these have been made habitable according to our instructions, 34 are in the builders' hands and would have been completed if the weather conditions had held good, a tenemented house at Swalwell, let to three tenants is in the hands of a Newcastle firm of Solicitors, and with whom we are dealing, another tenemented house at Swalwell let to nine tenants, we are promised is to be put in hands early in the Spring, and the same promise holds good to a house in Chapel street, Dunston.

Two houses at Whickham—in the Front street—are to be put in hand as soon as the work now in progress at Baker's entry, Swalwell, is completed. Both lots of properties belong to the same owner.

The remaining house refers to No. 133 Back Ravensworth road, Dunston.

In February last, we presented a detailed report to the Sanitary Committee, of two back rooms here, which were let to a family of four persons, at a weekly rental of 2/6.

This property was formerly a downstairs flat of three rooms, but the best room, from a sanitary point of view—the front one—had been converted into a shop, and let by the owner to a separate tenant.

There was an absence of proper sunlight into the two rooms, and an absence of through ventilation.

In our opinion they were unfit for human habitation.

The owner persisted that the rooms should not be closed, but eventually, on a deputation of the Sanitary Committee inspecting them, our opinion was upheld, and the rooms were closed forthwith.

COWBYRES AND DAIRIES:—Several improvements have been made in different cowbyres during the year, and the work satisfactorily completed.

We had to take drastic action in one case, with the result that it has now ceased to be a dairy farm.

The register contains the names of five cow-keepers, twenty cow-keepers who are also purveyors of milk, and three dairymen.

The premises are visited as frequently as possible.

SLAUGHTER HOUSES:—The ten licensed slaughter houses in the district are kept in a clean condition, and are kept under supervision, as are also the meat shops.

The licenses were all renewed in April last.

FISH FRIERS' PREMISES:—These premises are inspected' from time to time.

In February last, an application to commence the trade of a Fish Frier in Front Street, Swalwell, was before the Sanitary Committee, but was refused.

The application was renewed in September, and was again refused.

FACTORIES AND WORKSHOPS:— Two factories, fourteen workshops, and nine bake-houses were on the register at the end of the year.

They are kept in a sanitary condition.

Three "Notice of Occupation" forms were received from H. M. Factory Inspector during the year.

No complaints have been received.

PETROLEUM ACT:— Two petroleum licenses and one for the storage of Carbide of Calcium were again renewed.

One new license for the storage of Naptha was granted during the year. Previous to the licenses being granted, the premises were visited and found to comply with the provisions of the Act and the Home Office Regulations.

COMMON LODGING HOUSES:—There are none in the district

MILK SHOPS AND ICE CREAM SHOPS:—These premises require a good deal of supervision in order to keep them up to the standard, and which, as far as possible, is given them.

In February last, a petition signed by four Whickham residents was sent to the Council. It referred to manure being deposited outside a market garden at Whickham, and in the vicinity of the houses occupied by the complainants.

The matter was left in our hands and was immediately dealt with—no further complaint has been received.

GEORGE E. HOPPER,
Sanitary Inspector

Continuation of Medical Officer's Report.

To the above report in accordance with the requirements of the Local Government Board, I have to add that the scavenging of the villages is undertaken by the Council itself with its staff of workmen and is done efficiently while in out of the way isolated farm houses and cottages it is supervised.

At the best, the removal of the contents of ash-closets is very unpleasant work. The carts used should have covers, but I am not at all convinced that the work is more agreeably done during the night than during the day. When done during the night, not only is the noise disturbing but it creates a tendency for occupiers to keep their bedroom windows closed. The cleaning is done weekly which is generally sufficient, but it is advisable to shorten the interval during summer months with the special view of preventing the development of flies from eggs which occurs in just about a week.

In some cases undoubtedly the closets are overflowing before the end of the week, owing largely to the great consumption of coal through the custom of supplying this to the miners free as part of their remuneration.

As the most important sanitary reform of the near future, I would most earnestly urge the Council to consider the question of the total abolition of these insanitary structures and the substitution of water closets and covered ash bins. Throughout the country most progressive Councils are moving in this direction. I recognise the great difficulties in the way, and yet hope that we will not be found lagging behind other districts.

As medical adviser to the Council, it is my duty to point out and to urge what I consider the best for the public health altogether apart from financial considerations, but I recognise that it is no less the duty of the Council, even if they agree with me, to consider most carefully the financial aspect, and we can only get into more or less harmony when the Council determines to go as far in the direction we advocate as they can with due regard to these financial considerations. Two great facts have thrust this subject into prominence, one is the fact that in the towns where such conversions have been completed, there has been a great decline in general mortality and a special decline in mortality from typhoid fever, and infantile diarrhoea, while it has been proved that in the veriest slums of these towns the dwellers after a period of strict supervision have learnt to manage the water closets quite well and have quickly appreciated the greatly increased comfort and health. The second great influence has been Dr. Wharton's report as Local Government Inspector completely confirming the above.

Again, both Mr. Hopper and myself are continually receiving complaints about the nuisance of ash-closets, from people who have come to reside in this district from other places, where the water carriage system prevails, and who cannot be reconciled to returning to these more primitive conditions, and who would rather take an otherwise inferior house at a higher rental, where there is a water-closet and bath room.

This fact builders and property owners are beginning to realise, and the more clearly and fully they realise it, the readier will they be to support this policy in their own interests.

This leads me to put before the Council for their consideration two methods by which this great reform might be effected. First, the Council has the power under Section 39 of The Public Health Acts Amendment Act, 1907, to enforce this universal conversion, but apparently this would entail their bearing one half of the cost, though according to a recent legal decision to which Mr. Hopper has directed my attention, this is somewhat doubtful.

This decision is so very important that I will give the whole case as printed in the "Sanitary Record".

CONVERSION OF SANITARY CONVENIENCES AT DARLINGTON.

A Decision of the Local Government Board.

Recently an appeal was made by a property owner in Darlington against the decision of the Town Council requiring him to provide water-closets under Sec. 36 of the Public Health Act, 1875.

Major Norton, one of the Board's Inspectors, held the inquiry at Darlington, and the appellant was represented by Mr. Thomas Richardson, barrister-at-law. The Town Council were represented by the Town Clerk, Mr. H. G. Steavenson.

Mr. Richardson, on behalf of the appellant, urged that as the Corporation had adopted the provisions of the Public Health Acts Amendment Act, 1907, they were precluded from proceeding under Sec. 36 of the Public Health Act, 1875, and, having done so, the notices were invalid. It was further urged that the Corporation, by acting in this way were seeking to avoid the responsibility of paying any part of the cost incurred, and that as such a large number of notices had been served under Sec. 36, the Council were, in fact, endeavouring to enforce a general scheme of water-carriage, to which they would have had to pay had they taken the necessary steps under the Amendment Act of 1907. Mr. Richardson quoted in support of his action several cases, and chiefly relied upon the decision in the case of *Wood v. Mayor, etc., of Widnes*.

The Town Clerk, in his reply, urged that the Corporation were acting strictly within their legal rights, and provided that the circumstances justified the serving of notices under Sec. 36, and each case was considered on its merits, the Town Council had clearly the option to decide whether they should proceed under the original Act

or under the Act of 1907, and he also contended that the case upon which the appellant relied, distinctly showed that this was so, and particularly directed the Board's attention to the portion of the judgment of Lord Halsbury, L.C., from which the following words were taken:—"I do not deny that the appellants (the Corporation), have power to do that (i.e., to enforce upon the whole district a complete alteration and improvement of the sanitary arrangements) by indirect means. They may go to any house and say that in their judgment that house is not provided with proper accommodation, and proper accommodation must be provided, and they may do the same thing to any number of houses all over the borough, but they must form a judgment upon each case separately".

Evidence was called on behalf of the Town Council to prove that the existing conveniences were of a most objectionable character, and that though a number of properties were being dealt with each particular case had been dealt with on its merits.

The Board has now issued an order confirming the decision of the Town Council, and requiring the property owner to pay the whole cost of executing the work.

A further expense would probably be incurred by the necessity of reconstructing certain of the main sewers while further difficulties might arise in connection with the final disposal of sewage which at present is into the Tyne.

At the same time, this would undoubtedly deal hardly, harshly and scarcely justly with many owners, whose plans both for comparatively recent construction and for compulsory, recent compulsory conversions from ashpit privies to ash-closets have been sanctioned or ordered by the Council.

Second, that if the Council, because of the above considerations, do not feel justified in enforcing universal conversion, I would strongly urge them to give us their fullest support and help

in getting such conversions made voluntarily by persuasion, they being prepared to enlarge or reconstruct any part of the main drainage that may be required as conversions are effected.

I do not doubt that a very great deal could be done in this way, During the year under consideration we got 26 conversions and at the beginning of the year we had 29 more promised and now being effected and since the beginning of the year, others have been arranged and more are under consideration.

This is the kind of thing that you do not expect to get an equal number done annually, you expect the conversions to go on at an increasing rate by the mere force of competition. The conversions are so quickly appreciated that every one causes the neighbours to clamour for a like result, so that it is quickly found that the owners who have effected the conversions find that they get better tenants and higher rents that in self defence, others are impelled to follow suit.

So convinced am I of this, that I would not hesitate to urge it upon the Council, as the better of the alternative methods, but for the fact that we have such a leeway to make up.

As shown in one of the summaries at the end of this report, we have throughout the district only 241 water-closets to 2391 ash-closets.

Still it would be making progress and moving in the right direction.

One other suggestion I would offer though it seems ungracious to do so, after the very great improvements that are being steadily effected, according to promise, by Messrs Bowes & Partners, at Marley Hill, it is that an effort should be made to induce this firm to go one step further and to introduce water-closets into those parts of the district where the conversions from back to back into through houses, with large paved yards, have not yet been carried out, instead of ash-closets as has been arranged. I make this suggestion

because I have a conviction that before many years have passed, the Local Government Board will take the matter out of our hands and simply compel these conversions and a universal water carriage system.

The Council took a great step in advance when it determined that no plans should be passed for new houses unless they showed a water closet. This has enabled us in practically every case where an ash-closet has become dilapidated or where the closet accommodation has been proved insufficient to get water closets constructed.

This is however not enough, and I repeat that we cannot be considered an up to date sanitary authority until we have effected a universal water carriage system.

PUBLIC ELEMENTARY SCHOOLS:—These are precisely as in previous reports except that a new Infant department has been constructed and opened at the Dunston Council School. They are all satisfactory from a sanitary point of view.

HOSPITAL ACCOMODATION is precisely as in former reports, but has not, during the year proved sufficient for the district, if the policy be continued of advising and urging all cases of Typhoid Fever, Scarlet Fever and Diphtheria to be sent for isolation and treatment. On two occasions it became grossly over crowded, and at one time further cases could not be admitted. Even when full, and more than full there was not accomodation for a full nursing staff. I regard this as serious, as nothing could be more conducive to cross infection than an insufficient staff of nurses.

It seems to me that the time has come for this Council to seriously consider the alternatives of 1st, the enlargement of the hospital to provide for more patients and for more nurses, 2nd, to provide hospital accomodation independently for its own patients, or 3rd, to discourage the sending to hospital indiscriminately all cases of infectious disease.

WATER SUPPLY.—Throughout the greater part of the district, this is ample in quantity and excellent in quality; Whickham, Swalwell and Dunston are supplied by the Newcastle and Gateshead Water Co., which has never failed. Marley Hill is supplied by the Weardale and Consett Water Co. This has also been excellent in quality, and generally, in quantity, but during the Summer and Autumn it broke down, through the prolonged dry season. The result at Marley Hill was serious, and almost disastrous. The Company must be induced to extend its gathering ground, or increase its reservoirs, so that this calamity cannot occur in the future.

We may now briefly review the district to show what, in each Ward, has been done, and what still remains to be done.

WHICKHAM:—Here the general sanitary condition is satisfactory though the prevalence of Diphtheria has caused a thorough investigation of the domestic sewerage, with the result of showing serious defects, which have been largely removed by re-construction, and which is still proceeding. An excellent Village Institute has taken the place of a very insanitary tenemented house. The two dilapidated and overcrowded houses in Back Row, referred to in last report as being dealt with, are still being dealt with. One of the tenants has been removed to allow of the improvements, which are still to be done.

A great improvement is being effected by the making up and properly constructing of Cornmoor Road.

SWALWELL:—I am sorry to say that comparatively little has been effected here since last report, one block of tenemented property at Baker's Entry, has been, and is being, dealt with efficiently, but much remains to be done at this, the west end of the village.

The improvements at Poorhouse yard, which were referred to in last report, as having been excellently begun and then stopped, have been very little advanced.

Now and again a very little is done, but at such a rate that possibly before the end of the century, the few houses may be regarded as reasonably fit for human habitation. With a little effort, the whole thing might be completed in a few weeks, but the little now and again just prevents drastic measures being taken, with the deplorable result that one can scarcely say that anything really has been accomplished.

The adjoining roads and yards remain in the same deplorable condition that I have described annually since I became M. O. H., ten years ago, though we have had continual promises of amendment. Surely it is time that more drastic measures were taken.

The constant supervision that this Ward requires in small matters seems to interfere with larger efforts at improvement.

The small improvements which have been effected from time to time and indicated in previous reports, have not been without effect as indicated by a very marked improvement in the vital statistics, but all the same it is the most disappointing of the Wards. It is very far short of an ideal Ward.

What I persistently maintain is, that you cannot expect cleanliness within the houses if you do not destroy or minimise squalor in the surroundings, and this generally prevails all about Poor house yard and Waterside.

MARLEY HILL:—Here there is nothing to record except the steady but slow progress of the great improvements arranged for. Most of the conversions from back to back to through houses at High Row, have been effected, the roads have been made and large, well-paved yards have been completed. The Hill itself has not been proceeded with, but has all been arranged for. The only thing wanted here is the completion of the scheme as arranged, with the suggestion that where not yet proceeded with, water closets

should be substituted for the earth closets contracted for, but as it seems to me, that can only be effected by mutual consent, as between the Council and the owners.

DUNSTON:—This Ward receives constant attention, and on the whole, is very satisfactory. It is a very large Ward with a population of over ten thousand, and in which most of the houses are modern. In some of the oldest parts the conditions are not very good, but they have been enormously improved.

It is in this Ward, in close proximity to both Newcastle and Gateshead, that the greatest demands, on the part of the inhabitants are for water-closets in place of ash-closets, and where the conversions are likely to be mostly effected by persuasion. It is essentially progressive and its representatives on the Council truly represent the aims and ambitions of the inhabitants.

With some of the property owners there, and still more with the representatives of the owners, we have had difficulties, but they have been surmounted, and there is a very marked tendency for them to come into line, and really assist us in effecting necessary improvements.

Dunston is in fact getting on very well. A couple of years ago the Sanitary Inspector was regarded as a terror, to-day he is a friend, and not to the tenants only, but to the owners as well.

Taking the district as a whole, I think we have reason to feel gratified at the steady progress made, though I do candidly think that the one Ward that now requires most attention, and still more rousing, is Swalwell, and yet beyond the matters I have indicated, it is difficult to say precisely, what reforms are most urgently required.

Appended are, 1st—A Summary of the work done by the Sanitary Inspector. 2nd—Administration of the Factory and Workshops Act. 3rd—The Statistical Tables as required by the Local Government Board.

I am,

MR. CHAIRMAN AND GENTLEMEN,

Your obedient servant,

ANDREW SMITH,
MEDICAL OFFICER OF HEALTH.

TABLES.

County of Durham.

SUMMARY of Work done in the Inspector of Nuisances' Department during the year 1914 in the URBAN DISTRICT of WHICKHAM.

1. PUBLIC HEALTH ACTS.	Number of Informal written notices by Inspector	Number of Formal Notices by order of Authority	Number of Nuisances abated after Notice	General Remarks
Dwelling-houses and Schools. { Foul Conditions Structural Defects Overcrowding ...		33 28 2	30 25 2	
Lodging-houses ...				
Dairies and Milkshops ...				
Cowsheds ...				
Bakehouses ...				
Slaughter-houses ...				
Ashpits and Privies ...		11	4	To be completed shortly
Deposits of Refuse and Manure ...		2	2	
Waterclosets... ..		3	3	
Defective Yard Paving ...		22	18	To be completed after March 31st.
House { Defective Traps ...		13	13	
Drainage { No Disconnection from sewers				
Other Faults		103	101	
Water Supply ...		7	7	
Pigsties ...		3	3	
Animals Improperly Kept				
Offensive Trades ...		1	1	
Smoke Nuisances ...		nil	nil	
Other Nuisances		45	44	
Meat Shops ...				
Marine Store ...				
Defective Ash-closets ...				
Poultry improperly kept ...		3	3	In addition the 28 cowkeepers and dairy-men have been twice notified re half-yearly limewashing of the interior walls of the cowbyers and dairies
Visits to ascertain if notices served have been complied with, etc., in addition to other work reported 736				
Supervision of drains works in progress ... 430				
Total 1166				
TOTALS ...		276	256	

Inspector's Report continued:-

	Number	Remarks.
II. WATER, FOOD AND DRUGS		
Samples of Water taken for analysis	4	
„ „ condemned as ...		
unfit for use ...	1	
Seizures of Unwholesome Food ...		
Convictions for exposing or selling		
Unwholesome Food ...		
Samples of Food and Drugs taken ...		
for Analysis ...		
„ „ found Adulterated ...		
III. PRECAUTIONS AGAINST INFECTIONOUS DISEASE		
Lots of Infectious Bedding stoved		
or destroyed	198	
Houses disinfected after Infectious		
Disease	198	
Schools do. do.		
Prosecutions for exposure of infected		
persons or things		
Convictions for do. do. do.		
IV. GENERAL.		
Number of New Houses erected		
during the year ...	15	
Number of such Houses occupied		
during the year	15	
Ashpit-privies converted into Ash-		
closets ...	4	
do. do. Water-closets	3	
Ash-closets do. do.	13	
Total number of Water-closets in ...		
District ...	241	
do. Ash-closets do	2091	
do. Ashpit-privies do	4	

GEORGE ERNEST HOPPER,

April 7th, 1915.

Inspector of Nuisances.

Annual Report of the Medical Officer of Health

For the year 1914, for the URBAN DISTRICT of WHICKHAM, on the administration of the Factory and Workshop Act, 1901, in connection with

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES AND HOMEWORK.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTOR OR INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notice,	Prosecutions.
Factories (including Factory Laundries).	2	...	None.
Workshops (including Workshop Laundries).	15	1	None.
Workplaces (Other than Outworkers' premises included in Part 3 of this report.	...	...	None.
Total	17	1	

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Pro- secutions.	
	Found,	Remedied	Referred to H M. Inspector,		
<i>Nuisances under the Public Health Acts:.</i>					
Want of cleanliness	—	—	—	—	
Want of Ventilation	—	—	—	—	
Overcrowding	—	—	—	—	
Want of drainage of floors	—	—	—	—	
Other nuisances	—	—	—	—	
Sanitary accomodation	1 promised to be remedied at an early date.	—	—	—	
Act has been adopted					insufficient ...
No standard fixed					unsuitable or defective
	not separate for sexes	—	—	—	
<i>Offences under the Factory & Workshop Act:</i>					
Illegal occupation of underground bakehouse (s.101)	—	—	—	—	
Breach of special sanitary requirements for : Bakehouses (ss. 97 to 100).	—	—	—	—	
Failure as regards lists of outworkers (s. 107).	—	—	—	—	
Other offences	—	—	—	—	
(Excluding offences relating to outwork which are included in part 3 of this report.)					

Annual Report continued:-

3. OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspectors of Factories:—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	
Action taken in matters referred by (Notified by H.M. Inspectors H.M. Inspectors as remediable un- der the Public Health Acts but not) Reports (of action taken) sent under the Factory Act (s. 5) to H.M. Inspectors.	None
Other	None
Underground Bakehouses (s. 101) There are none...	
Certificates granted during the year	
In use at the end of the year	
Home work:—	Number of
<i>Lists of Outworkers</i> (s. 107)	Lists. Outworkers.
Lists received... ..	None None
Addresses of outworkers { forwarded to other Authorities .. There are none received from other Authorities ...	
<i>Homework in unwholesome or infected premises:—</i>	Wearing Apparel Others
Notices prohibiting homework in unwholesome premises (s. 108)	None None
Cases of infectious disease notified in homeworkers' premises ...	None None
Orders prohibiting homework in infected premises (s. 110 ...	None None
	Number. (2)
Workshops on the Register (s. 131) at end of the year	
WORKSHOP BAKEHOUSES ONLY	
Mrs. Margaret Taylor, 102, Ravensworth Road, Dunston, Baker.	
Stephenson & Mallam 2 & 4 Ravensworth Rd. Dunston Baker.	
Thomas Handy, Commercial Buildings, Dnnston.	
R. & J. Culey, 12, Market Lane, and Back Ellison Road, Dunston	
A. Thompson. 72 Wellington Road, Dunston.	
Alexander Hall, The Crescent, Dunston.	
E. Robson Ryle, Front Street, Swalwell.	
Miss Hope, Front Street, Whickham.	
Total number of workshops on Register 23	Total

Vital Statistics for the Whole District during 1914 and Previous Years.

YEAR.	Popu- lation estimated to middle of each Year	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT		Deaths of Non- residents in Public Institu- tions in the District.	Deaths of Residents registered in Public Institu- tions beyond the District	NETT DEATHS BELONGING TO THE DISTRICT.					
		Un- corrected Number.	NETT		At all Ages	Under 1 Year of age			AT ALL AGES					
			Number	Rate					Number	Rate per 1,000 Births registered	Number	Rate		
1	2	3	4	5	6	7	8	9	10	11	12	13		
1909	16719	605	605	36.1	208	12.4	0	15	58	95	223	13.3		
1910	17261	552	552	31.9	207	11.9	0	16	64	115	223	12.9		
1911	18469	551	556	30.1	224	12.1	2	32	80	143	254	13.7		
1912	19164	573	580	30.2	216	11.2	3	29	50	86	242	12.6		
1913	19857	563	565	28.4	235	11.8	9	41	85	150	267	13.4		
1914	20575	546	550	26.7	222	10.78	4	44	63	114	262	12.7		

* Rate in Columns 5, 7, and 13 calculated per 1000 of estimated population

NOTE.—The deaths to be included in column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 6, corrected by the subtraction of the number in Column 5 and the addition of the number in Column 9.

By the term "Non-residents is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institu-tions elsewhere.

Area of District in acres (exclusive of area covered by water)—6,090

Total population at all ages.....18,332 At
Number of inhabited houses..... 3,577 { Census of
Average number of persons per house 4.9 } 1911

Table I continued
Vital Statistics of whole District continued.

I. Institutions within the District receiving sick and infirm persons from outside the District	II. Institutions outside the District receiving sick and infirm persons from the District	III. Other Institutions, the deaths in which have been distributed among the several localities in the District
None	Gateshead Union Workhouse County Asylum. Conjoint Isolation Hospital, Normans Riding	

Is the Union Workhouse within the District? No.

Cases of Infectious Disease Notified during the Year 1914

TABLE II

Notifiable Disease.	Cases Notified in the Whole District.										Total cases notified in each Locality				No. of Cases re-moved to Hospital from each Locality.				Total cases re-moved to Hospital
	At Ages.—Years.																		
	At all Ages	Under 1.	1 to 5.	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	Whickham	Swalwell	Marley Hill	Dunston	Whickham.	Swalwell	Marley Hill	Dunston			
Small-pox	
Cholera	
Diphtheria (including Membranous croup)	65	...	18	42	4	1	...	...	43	10	3	9	...	...	...	...	34
Erysipelas	14	1	...	...	4	5	4	...	3	3	2	6	...	...	...	...	...
Scarlet fever	116	1	31	80	4	...	...	...	18	39	1	58	...	...	...	...	78
Typhus fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric fever	4	...	...	1	1	1	1	...	...	...	2	2	...	...	...	...	3
Relapsing fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal fever	2	...	...	...	...	2	...	...	1	1	...	...	...	...	...	...	...
Ophthalmia Neonatorum	5	5	...	...	...	...	...	...	1	2	...	2	...	...	...	...	...
Pulmonary Tuberculosis	31	...	...	5	10	13	3	...	6	14	...	11	...	...	...	...	...
Other Tuberculosis	11	...	2	6	3	...	...	...	3	2	...	6	...	...	...	...	...
Totals	248	7	51	134	26	20	8	...	75	71	8	94	...	...	...	...	115

ISOLATION HOSPITAL:—Blaydon, Whickham, Ryton Conjoint Hospital, Norman's Riding, in Blaydon Urban District
Total available beds, 41. Number of Diseases that can be concurrently treated 3, and similar Conjoint Smallpox
Hospital at Sealburn in Ryton Urban District 12 beds, now converted into a Sanatorium for Pulmonary Tuberculosis.

TABLE III.

Causes of, and Ages at, Death during Year 1914.

Causes of Death.	Nett Deaths at the subjoined ages of Residents whether occurring within or without the District,									Deaths of Residents or non- Residents in Insti- tutions in District.
	All ages	Under 1	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	
All causes { Certified ... Uncertified	258 4	63	15	7	20	20	35	42 2	56 2	
Enteric Fever	1						1			
Small-pox										
Measles... ..	4	3	1							
Scarlet fever	3		1	1	1	...	...	...	...
Whooping-cough	1		1							
Diphtheria and Croup	7			1	6	...			...
Influenza	2		...	...	...		1	1		
Erysipelas										
Phthisis (Pulmonary Tuberculosis	30	1		1	2	10	10	6		
Tuberculous Meningitis	2	1	...	...	1					
Other Tubercular Diseases	7	2	1			2	2	...	...
Cancer, Malignant Disease	13	...		...	...	...	1	6	6	
Rheumatic fever ... ..		...	...	...		...
Meningitis	1	...	...	...	1	...	...	
Organic Heart Disease...	20			...	1	2	3	8	6	
Bronchitis	14	6	1	...	...	...	...	1	6	
Pneumonia (all forms)	19	3	3	2	2	...	2	3	4	
Other Diseases of Respira- tory Organs...	5	...	...	...	1	...	...	1	1	
Diarrhœa and Enteritis	17	11	4	...	1	...	...	3	1	
Appendicitis and Typhlitis									...	
Cirrhosis of Liver										
Alcoholism		...	...	...	...	...	...		...
Nephritis & Bright's disease	5		...		1	1	1	1	1	
Puerperal Fever... ..		...	...	...	...		...
Other accidents and diseases of Pregnancy and Parturition	4	...				1	3			
Congenital Debility and Malformation, including Premature Birth	33	31	2	...	...	...	...	...	...
Violent deaths excluding suicides	11		...	2	2	2	4	...	1	
Suicides	1						1			
Other defined diseases...	44	5	1		1	2	6	13	16	
Diseases ill-defined or unknown	18			...		...		2	16	
	262	63	15	7	20	20	35	44	58	

TABLE IV.

INFANTILE MORTALITY

Deaths from stated Causes in Weeks

CAUSE OF DEATH				Under 1 Week,	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.
ALL CAUSES.	Certified	...	...	19	1	3	2
	Uncertified	...	...		
Common Infectious Diseases	Small Pox	...	...		
	Chicken-pox	...	...		
	Measles	...	...	...	...	...	...
	Scarlet Fever	...	...		
	Diphtheria, Croup	...	...		
Diarrhoeal Diseases,	Whooping Cough	...	...	...	...	...	...
	Diarrhoea,	...	...	...	...	...	...
Tuberculous Diseases	Enteritis,	...	...	...	...	...	...
	Tuberculous Meningitis	...	...	...	...	...	...
	Abdominal Tuberculosis	...	...		
Wasting Diseases.	Other Tuberculous Diseases	...	...	...	...	...	...
	Congenital Malformations	...	...	...	...	...	...
	Premature Birth	...	...	9		1	
	Atrophy, Debility, Marasmus	...	...	5		1	2
	Atelectasis	...	...	2			
	Injury at Birth	...	...	1	...	...	...
	Erysipelas	...	...		
	Syphilis	...	...		1	1	
	Rickets	...	...		
	Meningitis (not Tuberculous)	...	...		
	Convulsions	...	...	2	...	...	...
	Gastritis,	...	...		
	Laryngitis	...	...		
	Bronchitis	...	...	...	...	...	...
	Pneumonia	...	...	...	...	...	...
	Suffocation, Overlying	...	...		
	Other Causes	...	...	...	...	...	...
				19	1	3	2

District (or sub-division) of Whickham.

 Births in the year } legitimate 534
 } illegitimate 16

Deaths from all Causes at all ages





